

## REMARKS

Claims 1-36, 41-53, and 55-58 are cancelled herein without prejudice to renewal. Claims 37, 51, and 54 are amended herein. New claims 59-78 are added herein.

Claim 37 and 51 are amended to remove reference to non-elected subject matter, and to place them in independent form. Claim 54 is also amended to recite that the amount administered is "therapeutically effective." Support for this amendment can be found in the specification on page 24, lines 1-3.

Support for new claims 59-61 and 69-71 and can be found throughout the specification, specifically at page 50, line 25 to page 57, line 16, page 86, line 1 to page 88, line 17, and in original claim 52. Support for new claims 62-68 and 72-78 can be found throughout the specification, specifically on page 25, line 15 to page 38, line 15, and in original claims 1-9, 15-18, and 23-27.

No new matter has been added. Examination of the subject application is respectfully requested.

### Telephone Conference

Examiner DeCloux is thanked for the very helpful telephone conference of September 10, 2002, in which the restriction requirement was discussed. The rejoining of Group XIII (drawn to a method of treating a disease using a polypeptide) and Group VII (drawn to a method of reducing an immune response using a polypeptide) was discussed. In this telephone conference it was noted that reducing an immune response is a component of treating a disease caused by antigen specific T cells. Applicants believe that as a result of this telephone conference groups XIII and VII have been rejoined.

### Restriction Requirement

Applicants herein elect Group XIII, with traverse. The re-joining of Group XIII (claim 54, limited to polypeptide use) with Group VII (claims 37-40, drawn to polypeptide use) was discussed with Examiner DeCloux on September 10, 2002, as described above. In view of this

telephone conference Applicants have retained claims 37-40 and 54 in the present response.  
New claims 59-78 depend from either claim 37 or 54, or a dependent claim therefrom.

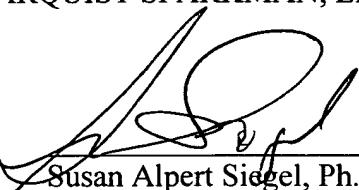
### Conclusion

If any minor matters remain to be addressed prior to examination, Examiner DeCloux is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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**Marked-up Version of Amended Claims  
Pursuant to 37 C.F.R. §§ 1.121(b)-(c)**

Please cancel claims 1-36.

Please amend the following claims:

37. (Amended) A method for reducing an immune response against an antigenic determinant in a subject, comprising:

administering a therapeutically effective amount of [the polypeptide of claim 3, or of a nucleic acid encoding the polypeptide of claim 3] a purified MHC Class II polypeptide comprising covalently linked first and second domains, wherein:

the first domain is a human MHC class II  $\beta$ 1 domain and the second domain is a mammalian MHC class II  $\alpha$ 1 domain and wherein the amino terminus of the second domain is covalently linked to the carboxy terminus of the first domain and wherein the MHC class II molecule does not include an  $\alpha$ 2 or a  $\beta$ 2 domain; and

subsequently presenting the antigenic determinant to the subject,

wherein administration of the polypeptide [or the nucleic acid sequence] reduces the immune response when the antigenic determinant is presented in the subject.

38. (Reiterated) The method of claim 37, wherein the reduced immune response is a decrease in an influx or proliferation of a T cell, a macrophage, a B cell, or an NK cell.

39. (Reiterated) The method of claim 37, wherein the reduced immune response is a reduction in the expression of a cytokine.

40. (Reiterated) The method of claim 37, wherein the reduced immune response is an induction of a T suppressor cell response.

Please cancel claims 41-53.

54. (Amended) A method of treating a disease caused by antigen-specific T-cells, comprising

administering to a patient a composition comprising a therapeutically effective amount of a [polypeptide according to claim 3, or a nucleic acid encoding the polypeptide of claim 3,] a purified MHC Class II polypeptide comprising covalently linked first and second domains, wherein the first domain is a human MHC class II  $\beta 1$  domain and the second domain is a mammalian MHC class II  $\alpha 1$  domain and wherein the amino terminus of the second domain is covalently linked to the carboxy terminus of the first domain and wherein the MHC class II molecule does not include an  $\alpha 2$  or a  $\beta 2$  domain;

thereby treating the disease.

Please cancel claims 55-58.

Please add the following new claims:

59. (New) The method of claim 54, wherein disease caused by antigen-specific T-cells rheumatoid arthritis, chronic beryllium disease, insulin-dependent diabetes mellitus, throiditis, inflammatory bowel disease, uveitus, polyarteritis, Multiple Sclerosis or Myasthenia Gravis.

60. (New) The method of claim 54, wherein the disease is an autoimmune disorder.

61. (New) The method of claim 60, wherein the disease is Multiple Sclerosis.

62. (New) The method of claim 54, wherein the covalent linkage between the first and second domains is provided by a peptide linker sequence.

63. (New) The method of claim 54, wherein the polypeptide further comprises, covalently linked to the amino terminus of the first domain, a third domain comprising an antigenic determinant.

64. (New) The method of claim 63, wherein the antigenic determinant is a peptide antigen.

65. (New) The method of claim 63, wherein the covalent linkage between the first and third domains is provided by a peptide linker sequence.

66. (New) The method of claim 54, wherein the polypeptide further comprises an antigenic determinant associated with the polypeptide by non-covalent interaction.

67. (New) The method of claim 66, wherein the antigenic determinant is a peptide antigen.

68. (New) The method of claim 54, wherein the polypeptide further comprises a covalently linked detectable marker or toxic moiety.

69. (New) The method of claim 37, wherein subject has rheumatoid arthritis, chronic beryllium disease, insulin-dependent diabetes mellitus, thyroiditis, inflammatory bowel disease, uveitis, polyarteritis, Multiple Sclerosis or Myasthenia Gravis.

70. (New) The method of claim 37, wherein the subject has an autoimmune disorder.

71. (New) The method of claim 37, wherein the subject has Multiple Sclerosis.

72. (New) The method of claim 37, wherein the covalent linkage between the first and second domains is provided by a peptide linker sequence.

73. (New) The method of claim 37, wherein the polypeptide further comprises, covalently linked to the amino terminus of the first domain, a third domain comprising an antigenic determinant.

74. (New) The method of claim 73, wherein the antigenic determinant is a peptide antigen.

75. (New) The method of claim 73, wherein the covalent linkage between the first and third domains is provided by a peptide linker sequence.

76. (New) The method of claim 37, wherein the polypeptide further comprises an antigenic determinant associated with the polypeptide by non-covalent interaction.

77. (New) The method of claim 76, wherein the antigenic determinant is a peptide antigen.

78. (New) The method of claim 37, wherein the polypeptide further comprises a covalently linked detectable marker or toxic moiety.